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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,638	01/09/2002	Jeong Jin Cho	SEC.914	3034

7590 09/23/2003

VOLENTINE FRANCOS, P.L.L.C.  
Suite 150  
12200 Sunrise Valley Drive  
Reston, VA 20191

EXAMINER

POLK, SHARON A

ART UNIT

PAPER NUMBER

2836

DATE MAILED: 09/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/040,638	CHO ET AL.
	Examiner Sharon Polk	Art Unit 2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 09 January 2002.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-4, 7-10, 13-20 is/are rejected.

7) Claim(s) 5,6,11 and 12 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 09 January 2002 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Drawings***

3. Figures 1, 2A-2C should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to because figure 3, blocks 37, 43, and 57 are not labeled with a written description. A proposed drawing correction or corrected drawings

are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Specification***

4. The disclosure is objected to because of the following informalities: the examiner noticed that the resistor, element 91 of figure 7, was inadvertently given the number 93. Applicant is required to thoroughly check the entire specification to correct other such occurrences. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 1-4, 7-10, 13-17, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roof et al., (Roof), US 4,843,533.**

With regard to claims 1, 7, and 13, Roof teaches a power management system receiving AC power to supply a load, the system comprising (e.g., fig. 2):

an emergency cutoff circuit (132) for controlling a power relay (142) selectively connecting the AC power to the load;

a first power controller (160, 118) for storing a DC voltage converted from the AC power and for releasing the DC voltage when transient power interruption occurs; and

a second power controller (162) for supplying an operation voltage to the facility, the operation voltage responding to the DC voltage provided from the first power controller when the transient power interruption occurs (e.g., abstract).

With regard to claims 2, 8, Roof teaches or fairly suggests the second power controller determines a time period wherein the DC voltage decreases to the minimum operation voltage (e.g., 4:56-68, 5:1-64).

With regard to claims 3, 9, and 14, Roof teaches or fairly suggests the claimed trip prevention circuit (e.g., 4:32-55).

With regard to claims 4, 10, 16, 17, and 19 Roof teaches or fairly suggests the claimed rectifier/converting means (110) and condenser/storage device (118).

With regard to claim 20, official notice is taken that a step-down transformer is a converter. As such, one of ordinary skill in the art at the time of the invention would have been motivated to include a step-down transformer as a matter of design choice for the purpose of proving the proper operating voltage.

With regard to claims 1, 7 and 13, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Therefore, Roof meets the limitation of the claims.

With regard to claim 15, official notice is taken that the recitation describes a natural consequence or outcome of the rectifier. Thus the feature is inherently taught by Roof.

**Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roof in view of Suzuki et al. (Suzuki), US 5,710,988.**

With regard to claim 18, Roof teaches the claimed system, but lacks the teaching of the claimed display unit. However Suzuki teaches or fairly suggests this feature (e.g., 5:42-45). One of ordinary skill in the art at the time of the invention would have been motivated to modify Roof with the display unit as taught by Suzuki for the purpose of making the user aware of deterioration of the power of the storage device (2:1-2).

#### ***Allowable Subject Matter***

6. Claims 5, 6, 11, 12, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: With regard to claims 5 and 11, the claimed resistor, diode, and further are known elements performing their claimed function. However the prior art of record does not teach or fairly suggest the claimed elements in combination with the additional recited elements of the first power controller as claimed.

With regard to claims 6 and 12, the condenser and transformer are known elements performing the function as claimed. However, the prior art of record does not teach or fairly suggest the switch responding the control signal to regulate the voltage of the second coil of the transformer in combination with the additional elements of the respective independent claim.

#### ***Pertinent Prior Art***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Nos. 3,882,380, 4,870,528, 4,953,054, 4,999,728, 5,216,897, 5,237,480, and 5,333,105 disclose aspects of the claimed invention.

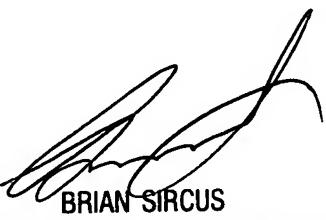
#### ***Communication with the PTO***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharon Polk whose telephone number is 703-308-6257. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 703-308-3119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

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BRIAN SIRCUS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800